

Particulate Matter (PM) Update

Environmental Programs
January 2006

PM-10

- Particulate Matter < 10 microns
- Respiratory Health Hazard
- Earthmoving activities – primary source
 - PM-2.5 created from burning fossil fuels

Regulatory Summary

- Clean Air Act
 - National Ambient Air Quality Standard
 - Health Based Standard
 - Regulated on a regional basis
 - Most of Maricopa County

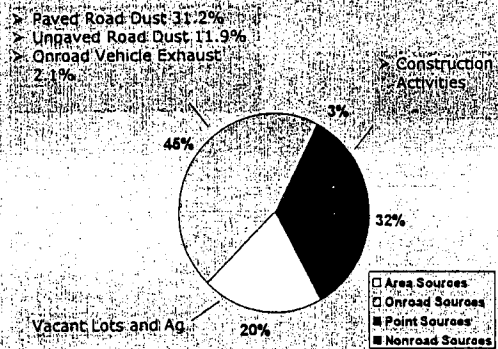
Maricopa County Non-Attainment Area

- 1996: Serious Non-attainment
- SIP Submitted to EPA
 - Required Attainment by 2006
- Continued Violations: 2005 and 2006

Adverse Consequences

- New State Implementation Plan Due Dec 07
- 5% Yearly Reductions
- Sanctions for Non-Compliance
 - Loss of Federal Transportation Funding
 - \$200,000,000 over 5-yr. TIP (2008)

Regional Modeled Source Contributions



Regulatory Authority

- Enforcement Delegated to Maricopa County
 - County Rule 310
 - Historically Underfunded and Understaffed
- Compliance with Standard Not Obtained – 1996 Serious Designation

Mesa's Leadership

- Mesa Council Directed Increased Commitment
- 1998 Mesa Particulate Pollution Control Ordinance
- 24/7 Environmental Complaints Hotline Established

Mesa's Particulate Pollution Ordinance

- Mesa City Code: Particulate Pollution Sources
 - Specific Dust Control Requirements
 - Based on County Rule 310
 - Enforcement Authority
 - Imminent Hazard "Stop Work" Authority

Mesa's Particulate Pollution Ordinance

- County Permit Required
 - Before Building Permit Issued
- 2005 Dust Permits and Inspections
 - 132 Reviewed
 - 248 Dust Inspections
- County Referrals
 - 8 Referred
 - 6 Enforcement Actions

Examples of Dust Control Issues



Examples of Well Maintained Sites



Complaint Response

**24/7 Environmental
Hotline
(480) 644-3599**

Internal Control Measures

- Comprehensive County Permit
 - All Routine Earth Moving Activities
- Annual City Employee Training
 - 2005 - Approximately 200 Employees
 - Parks
 - Streets
 - Utilities (Gas, Electric, Water field crews)
 - Building Safety Plan Reviewers
 - Engineering (Design and Field Inspectors)

Internal Control Measures

- City Owned Vacant Lots Inspected Monthly
 - Control Measures Instituted
- PM-10 Certified Street Sweepers (In House & Contracted)

Internal Control Measures

- Unpaved Roads
 - Annexed Areas
 - < 2 Miles of Unpaved Roads
- Unpaved Shoulders
 - 69 Miles Total/62 Stabilized
- Unpaved Alleys
 - 82 Miles Total
 - No Longer Used

Recommendations

- Increase Staff Training: >200 Additional Employees
 - Code Compliance
 - Solid Waste
 - HazMat Team/Fire Prevention
 - Utilities Service
 - Meter Readers

Recommendations

- Employee Training:
 - Identification of Dust Control Problems
 - Visible Emissions
 - Trackout
 - Referral to Environmental Hotline

Recommendations

- Increase Publication of Environmental Hotline
 - Citywide Communication
 - Intercom
 - Open Line
 - City Website
 - Employee Newsletters
 - City Manager Messages

Recommendations

- MAG WORKSHOP
 - Regional Cities
 - Presentations on Best Practices
 - Mesa will present our local program